**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT**
**COMMISSION OF THE STATE OF CALIFORNIA**
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**APPLICATION FOR CERTIFICATION FOR THE *CARLSBAD ENERGY CENTER PROJECT***

**DOCKET NO. 07-AFC-6**

## ERRATA TO THE PRESIDING MEMBER'S PROPOSED DECISION

After reviewing the comments submitted by the parties and the public by the June 8, 2011, deadline for comments, we recommend the following changes[1] to the May 9, 2011, Presiding Member's Proposed Decision (PMPD):

## INTRODUCTION

### 1. Introduction, p. 1, third paragraph, revise as follows:

The 23-acre CECP would be constructed and operated in the northeast section of the larger, 95-acre **Encina Power Station (**EPS**)** power plant complex. The proposed CECP site is currently occupied by the EPS east tank farm, including above-ground fuel oil storage Tanks 5, 6, and 7. These dormant fuel oil storage tanks would be demolished and removed, and the soil upon which the tanks currently stand would be remediated, as appropriate and necessary. The EPS facility has been in operation since 1954. EPS Units 1, 2, and 3 (circa 1950 steam boilers that provided the initial electrical generation) would be permanently retired once the CECP is approved and operational. EPS Units 4 and 5, part of a subsequent EPS expansion that occurred in the late 1970s, would continue generating electricity regardless of this proceeding or its outcome. **However the Applicant has committed to planning for the removal and redevelopment of the portion of the EPS complex containing Units 1 through 5 once all of the units are no longer needed for the reliable operation of the electricity system. See conditions of certification Land-2 and Land-3 and the related discussion in the Land Use section of this Decision.**

### 2. Introduction, p. 2, fourth full paragraph, revise as follows:

If approved by the Energy Commission, CECP construction is proposed to begin during the second or third quarters of 2011, and take 25 months to complete. The Applicant expects commercial operations to begin by summer of ~~2012~~ **2013**. Major milestones for the planned CECP construction schedule include:

[1] Where text is modified, changes are shown in **bold underline**/~~strikeout~~ (**new text**/~~deleted text~~).

**3. Introduction, p. 7, third paragraph, revise as follows:**

The Committee published the PMPD on May 9, 2011, and held a Committee Conference in Carlsbad on May 19 **and 20**, 2011. **In addition to taking Public and Party comments, the Committee reopened the Evidentiary Record and conducted additional Evidentiary Hearings on specified subtopics in the areas of Air Quality, Land Use, Worker Safety and Fire Protection, seismic safety, and Soil and Water. An Errata containing recommended changes to the PMPD was issued on June 14, 2011.**

The Full Commission adopted the PMPD and Errata as submitted at the **June ___, 2011**, business meeting.

**4. Introduction, p. 7, last paragraph, revise as follows:**

The record contains public comments from concerned individuals and organizations. Throughout these proceedings, as reflected in the transcribed record, the Committee provided an opportunity for public comment at each Committee-sponsored conference and hearing. ~~Extensive~~ **Numerous oral and written** public comments were received during the Evidentiary Hearing **and to a lesser extent during the PMPD comment hearing and comment period**~~, both orally and in writing~~. The significant comments are addressed throughout the remainder of this Decision, either directly or in the narratives.

**PROJECT ALTERNATIVES**

**5. Alternatives, p. 2, third bulleted paragraph, revise as follows:**

- Allows the retirement of existing EPS Units 1, 2, and 3, and assists in ~~the retirement of the South Bay power plant and~~ the eventual retirement of existing EPS Units 4 and 5;

**6. Alternatives, p. 17, last paragraph, revise as follows:**

The City of Carlsbad continues to maintain that, by focusing on alternative sites in Carlsbad, we failed to analyze a "reasonable range" of alternatives. Their comments were addressed by Staff in the Final Staff Assessment. **(Ex. 200, p. 6-20.)** We have nothing further to add to that discussion.

**7. Alternatives, p. 18, Finding 5, revise as follows:**

5. **No alternative, including** ~~Neither~~ the "no project" ~~nor any other~~ alternative would ~~not~~ avoid or substantially lessen potentially significant environmental impacts since no significant unmitigable impacts have been established.

**GREENHOUSE GAS EMISSIONS**

**8. Greenhouse Gases, p. 2, last partial paragraph, revise as follows:**

The Energy Commission recognizes that meeting the AB 32 goals is vital to the state's economic and environmental health. CARB staff is developing regulatory language to implement its plan and holds ongoing public workshops on key elements of the recommended GHG reduction measures, including market mechanisms. The scoping plan adopted by CARB relies heavily on cost-effective energy efficiency and demand response, renewable energy, and other priority resources in the loading order (discussed below) to achieve significant reductions of emissions in the electricity sector by 2020. Even more dramatic reductions in electricity sector emissions would likely be required to meet California's 2050 greenhouse gas reduction goal. **CARB has approved a $CO_2$ Cap and Trade regulation that would, upon its completion and implementation, add to the market forces driving towards the most efficient fossil-fuel fired generation; and the CECP would be subject to this Cap and Trade regulation.** In evaluating the GHG emissions generated by a facility under our jurisdiction, we assess whether the facility would be consistent with and support these policies.

**9. Greenhouse Gases, p. 3, second full paragraph, revise as follows:**

Senate Bill (SB) 1368 of 2006, and regulations adopted by the Energy Commission and the Public Utilities Commission pursuant to the bill, prohibit utilities from entering into long-term commitments with any facilities having a capacity factor greater than or equal to a 60 percent that exceed an Emission Performance Standard (EPS) of 0.500 metric tonnes of CO2 per megawatt-hour. This is the equivalent of 1,100 pounds CO2/MWh. (Pub. Util. Code, § 8340 et seq.; Cal. Code Regs., tit. 20, § 2900 et seq.; CPUC D0701039.) (Ex. 222. p. 4.1-104.) The EPS is not applicable to the CECP facility because it is an intermediate or mid-merit facility that operates on a more intermittent basis than a baseload facility **(i.e., at less than a 60 percent capacity factor)**.

**10. Greenhouse Gases, p. 5, sixth paragraph, revise as follows:**

While Avenal was decided before the Natural Resources Agency amended its CEQA Guidelines to specifically address GHG Emissions, we find the above factors to be consistent with the CEQA Guidelines, particularly the guidance set forth in Title **14** ~~20~~, California Code of Regulations, section 15064.4(b)(1) & (3)~~.~~**:**

**(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:**

**(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting . . . .**
**(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions . . . .**

**11. Greenhouse Gases, p. 7, first paragraph, revise as follows:**

The South Coast Air Quality Management District (SCAQMD) approved a different approach to significance of GHG impacts at its December 5, 2008 Board Meeting. Rather than set a threshold for operational emissions, construction emissions are amortized over the life of a project and considered in combination with operational emissions. [See Proposal to Adopt Interim CEQA GHG Significance Threshold for Stationary Sources, http://www.aqmd.gov/hb/2008/December/081231a.htm. [retain footnote 3]**]**. Applying the SCAQMD approach to CECP, GHG emission from construction of CECP, amortized annually over the **project's operating life of 30 years** ~~construction period~~, would be **156** ~~2,250~~ MTCO2e tons per year, a tiny fraction of a percent of estimated annual emissions from operation.

**12. Greenhouse Gases, p. 14, Greenhouse Gas Table 3 and following two paragraphs, revise as follows:**

**Greenhouse Gas Table 3**
**Pending Projects in San Diego Basin**

| Project Name | Technology | MW | Status |
|---|---|---|---|
| Otay Mesa | NG combined cycle | 561 | **Operational**~~Under Construction~~ |
| Orange Grove | NG peakers | 94 | **Operational**~~Under Construction~~ |
| Wellhead Margarita | NG peaker | 44 | On Hold |
| Bull Moose | Biomass | 27 | Undergoing Permit Review |
| Lake Hodges | Pump Storage Hydro | 40 | Under Construction |
| **Pio Pico** | **NG peakers** | **300** | **Undergoing Licensing Review** |

Source: **EX 222, P. 4.1-112**~~**CAISO** 2008.~~ Current ~~S~~status updated ~~determined~~ by Energy Commission staff.

Assuming the addition of all the new facilities shown in the above table, **1039**~~766~~ MW will be added to the San Diego load pocket prior to **2015**~~2013~~. Retirement of Encina and South Bay would nevertheless constitute a net reduction of capacity in San Diego of **929** ~~902~~ MW, leaving **2,295**~~,022~~ MW of local capacity. This is ~~396~~ 140 MW less than that estimated by the CAISO as necessary to meet local capacity requirements **in 2015 (reference: 2013-2015 Local Capacity Technical Analysis, ISO, 12/31/10)**. The capacity provided by CECP will allow for the retirement of the Encina units (1-3) ~~and (with the Sunrise Powerlink) South Bay~~; it should also reduce operation of Encina Units 4-5, and facilitate their future retirement. (Ex. 222, pp. 4.1-111 – 4.1-112.)

Although staff's analysis supports a conclusion that the electricity system will create

fewer GHG emissions with the addition of CECP, CBD challenges the use of a system approach, claiming that it fails to provide an accurate description of project emissions. We disagree. We have already discussed why a system approach is appropriate. In addition, evidence in the record of this case demonstrates that the CECP is likely to displace less efficient, higher emitting facilities in the San Diego region when it operates, as well as support the shutdown of these facilities. CBD counters that this argument must fail because the system GHG emission reductions are not quantified. (CBD Opening Brief, p. 18; CBD PMPD Comments, pp. 4 - 15.) However, given the number of variables involved in dispatching decisions we would not expect precision in that regard. The impossibility of calculating exact system operations in to the future does not require the Energy Commission to ignore the compelling evidence presented by staff that the integration of CECP into to electricity system will result in a net decrease in system GHG emissions. "While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (Cal. Code Regs., tit. 14, § 15144.) We find that the Staff disclosed all relevant information about the project's potential GHG emission impacts, and that its conclusion does not fail due to the impossibility of specifically quantifying the GHG emission reductions identified.

**13. Greenhouse Gases, p. 19, Findings 7, 8, and 13, revise as follows:**

7. Even as more renewable generation is added to the California electricity system, gas-fired power plants such as the CECP will be necessary to meet local capacity requirements and to provide intermittent generation support, grid operations support, extreme load and system emergencies support, and general energy support. **New gas-fired generation units, when added to the electric** generation **and transmission grid, replace or displace the generation of existing units that are less efficient.**

8. When it operates, CECP will have a heat rate of 7,147 Btu/kWhr **which would make it significantly more efficient than nearly all other regional gas-fired generating units**.

13. The CECP's **quick start and fast ramping capabilities will help integrate additional** ~~operation will foster the addition~~ of renewable generation into the electricity system, **which is necessary to** ~~will~~ further reduce system GHG emissions **from the electricity generation system**.

**14. Greenhouse Gases, p. 20, Conclusion of Law 2, revise as follows:**

2. The CECP's operational **effect will be to reduce** GHG emissions **from the integrated electric grid, and** will not **result in** ~~cause~~ a significant environmental impact.

## AIR QUALITY

### 15. Air Quality, p. 6, first full sentence, revise as follows:

Condition AQ-SC6 requires the project owner to notify the Energy Commission ~~and the U.S EPA~~ whenever the owner requests ~~or~~ the Air District **or U.S. EPA** to modify the project's permit conditions.

### 16. Air Quality, p. 12, fourth full paragraph, revise as follows:

Condition of Certification **AQ-SC5**, integrates and augments the applicant's construction equipment mitigation to mitigate the PM and NOx emissions from the large diesel-fueled construction equipment. This condition**, which has been updated from the version in the FSA to the latest Commission-approved version,** requires the use of EPA/ARB Tier **3**~~2~~ engine compliant equipment for equipment over **50** ~~100~~ horsepower where available, ~~a good faith effort to find and use available EPA/ARB Tier 3 engine compliant equipment over 100 horsepower,~~ and also includes equipment idle time restrictions and engine maintenance provisions. ~~The Tier 2 standards include engine emission standards for NOx plus non-methane hydrocarbons, CO, and PM emissions; while the Tier 3 standards further reduce the NOx plus non-methane hydrocarbons emissions.~~ The ~~Tier 2 and~~ Tier 3 standards became effective for engine/equipment model years **2006**~~2001~~ to ~~2003 and models years 2006 to 2007, respectively~~, for engines between **50**~~100~~ and 750 horsepower.

### 17. Air Quality, p. 14, last paragraph and following tables, revise as follows:

**Air Quality Table 6** summarizes the maximum (worst-case) estimated daily emissions for CECP. Maximum daily emissions for turbines are based on 6 hours of startup, 6 hours of shutdown, and 12 hours of normal operation.

**Air Quality Table 6**
**CECP Worst-Case Hourly and Daily Emissions**

| | Hours | NOx | CO | VOC | SOx[a] | PM10 | $NH_3$ |
|---|---|---|---|---|---|---|---|
| Startup (lbs/hr) | 6 | 69.2 | 545 | 15.5 | 4.40 | 9.50 | 14.01 |
| Shutdown (lbs/hr) | 6 | 47 | 286 | 8.2 | 4.40 | 9.50 | 14.01 |
| Normal Operation (lbs/hr) | 12 | 15.1 | 9.2 | 4.0 | 4.40 | 9.50 | 14.01 |
| Emergency Fire Pump (lbs/hr) | 1 | 2.08 | 0.24 | 0.05 | 0.00 | 0.035 | 0.00 |
| Maximum (Single gas turbine, lbs/day) | | 877 | 5102 | 190 | 106 | 228 | 336 |
| Maximum (Two gas turbines, lbs/day) | | 1,754 | 10205 | 380 | 211 | 456 | 672 |
| Maximum (New Equipment, lbs/day) | | 1,756 | 10205 | 380 | 211 | 456 | 672 |

~~Source: CECP 2007a, Appendix 5.1B, Table 5.1B-2B and FDOC (SDAPCD 2009)~~
~~[a] $SO_2$ annual emissions are based on SDG&E tariff basis of 0.75 grains/100 dry standard cubic feet.~~

~~**AIR QUALITY Table 7** summarizes the maximum (worst-case) estimated daily~~

~~emissions for CECP. Maximum daily emissions for turbines are based on 6 hours of startup, 6 hours of shutdown, and 12 hours of normal operation.~~

**~~Air Quality Table 7~~**
**~~CECP Worst-Case Hourly and Daily Emissions~~**

| | ~~Hours~~ | ~~NOx~~ | ~~CO~~ | ~~VOC~~ | ~~SOx[a]~~ | ~~PM10~~ | ~~$NH_3$~~ |
|---|---|---|---|---|---|---|---|
| ~~Startup (lbs/hr)~~ | ~~6~~ | ~~69.2~~ | ~~545~~ | ~~15.5~~ | ~~4.40~~ | ~~9.50~~ | ~~14.01~~ |
| ~~Shutdown (lbs/hr)~~ | ~~6~~ | ~~47~~ | ~~286~~ | ~~8.2~~ | ~~4.40~~ | ~~9.50~~ | ~~14.01~~ |
| ~~Normal Operation (lbs/hr)~~ | ~~12~~ | ~~15.1~~ | ~~9.2~~ | ~~4.0~~ | ~~4.40~~ | ~~9.50~~ | ~~14.01~~ |
| ~~Emergency Fire Pump (lbs/hr)~~ | ~~1~~ | ~~2.08~~ | ~~0.24~~ | ~~0.05~~ | ~~0.00~~ | ~~0.035~~ | ~~0.00~~ |
| ~~Maximum (Single gas turbine, lbs/day)~~ | | ~~877~~ | ~~5102~~ | ~~190~~ | ~~106~~ | ~~228~~ | ~~336~~ |
| ~~Maximum (Two gas turbines, lbs/day)~~ | | ~~1,754~~ | ~~10205~~ | ~~380~~ | ~~211~~ | ~~456~~ | ~~672~~ |
| ~~Maximum (New Equipment, lbs/day)~~ | | ~~1,756~~ | ~~10205~~ | ~~380~~ | ~~211~~ | ~~456~~ | ~~672~~ |

Ex. 222, p. 4.1-27.
~~[a]~~ $SO_2$ annual emissions are based on SDG&E tariff basis of 0.75 grains/100 dry standard cubic feet.

**18. Air Quality, p. 17 (numbered as page 4), paragraph following Table 9 and following, revise as follows:**

The Applicant used the AERMOD model to estimate ambient impacts, and the SDAPCD completed additional modeling using AERMOD to assess compliance with the new federal 1-hour $NO_2$ standard. **Air Quality Table 10**, below, summarizes the results of the modeling analysis with both turbine units operating. (Ex. 222, pp. 4.1-35 – 4.1-36; Ex. 226.)

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**Air Quality Table 10 ~~11~~**
**CECP Normal Gas Turbine Operating Impacts – Both CTGs, (µg/m$^3$)**

| Pollutant | Averaging Period | Project Impact (µg/m$^3$) | Background (µg/m$^3$) | Total Impact (µg/m$^3$) | Limiting Standard (µg/m$^3$) | Type of Standard | Percent of Standard |
|---|---|---|---|---|---|---|---|
| $NO_2$ | **1 hour Federal** | -- | -- | **85.7[a]** | **100** | **NAAQS** | **86%** |
| | 1 hour **State** | 13.3 | 152.6 | 165.9 | 339 | CAAQS | 49% |
| | Annual | 0.1 | 22.8 | 22.9 | 57 | CAAQS | 40% |
| PM10 | 24 hour | 1.2 | 57 | 58.2 | 50 | CAAQS | 117% |
| | Annual | 0.1 | 24.2 | 24.3 | 20 | CAAQS | 122% |
| PM2.5 | 24 hour | 1.2 | 37.7 | 38.9 | 35 | NAAQS | 111% |
| | Annual | 0.1 | 12 | 12.1 | 12 | CAAQS | 101% |
| CO | 1 hour | 9.0 | 6,785 | 6,794 | 23,000 | CAAQS | 30% |
| | 8 hour | 1.9 | 4,011 | 4,013 | 10,000 | CAAQS | 40% |
| $SO_2$ [b] | 1 hour | 4.3 | 94.3 | 98.6 | 655 | CAAQS | 15% |
| | 3 hour | 2.0 | 84.9 | 86.9 | 1,300 | NAAQS | 7% |
| | 24 hour | 0.4 | 23.6 | 24.0 | 105 | CAAQS | 23% |
| | Annual | 0.0 | 10.7 | 10.7 | 80 | NAAQS | 13% |

Sources: Ex. 222, p. 4.1-36, Ex. (TBD)
[a] Represents the air quality standard basis of the three year average of the 98th percentile of maximum daily 1-hour values.

**19. Air Quality, p. 20 (numbered as page 7), second to last paragraph, revise as follows:**

If the Applicant chooses to use its currently owned PM10 credits to partially meet the Staff recommended offset liability, the Applicant's emission reduction fee for the remaining 13.1 tons of emissions would equal $251,520 **based on the Carl Moyer Program Guideline cost effectiveness cap value at the time of evidentiary hearing, and the cost will increase over time as ARB periodically updates the cost effectiveness cap value**.

**20. Air Quality, p. 22 (numbered as page 9), paragraph following Table 9 and following, revise as follows:**

The Applicant used stack and building parameters and emission data for the existing Encina Power Plant, specifically boiler units 4 and 5 that would remain after construction of the project, and generally followed the same modeling procedures used for the CECP operating emissions modeling analysis, using the most recent version of AERMOD (Version 07026). The modeling assumed worst-case short-term emissions for the CECP (cold startup) and assumed full load emissions for the existing Encina Power Station boiler units 4 and 5 and peaking turbine. Additionally, **the SDAPCD completed additional cumulative modeling using AERMOD to assess compliance with the new federal 1-hour $NO_2$ standard**. The results of **these**~~this~~ modeling effort**s**, **Air Quality Table 13**, show that CECP, along with the existing Encina Power Station, would not contribute to new short-term AAQS violations for $NO_2$ or CO.

**Air Quality Table 13**
**Cumulative Impacts Modeling Results (µg/m$^3$)**

| Pollutant | Averaging Period | Project Impact (µg/m$^3$) | Background (µg/m$^3$) [a] | Total Impact (µg/m$^3$) | Limiting Standard (µg/m$^3$) | Type of Standard | Percent of Standard |
|---|---|---|---|---|---|---|---|
| $NO_2$ | **1 hour Federal** | -- | -- | **88.3**[d] | **100** | **NAAQS** | **88%** |
| | 1 hour **State** | 133.5 | 152.6 | 286.1 | 339 | CAAQS | 84% |
| | annual [b] | 0.3 | 22.8 | 23.1 | 57 | CAAQS | 41% |
| PM10 | 24 hour [c] | 7.1 | 57 | 64.1 | 50 | CAAQS | 128% |
| | annual | 0.1 | 24.2 | 24.3 | 20 | CAAQS | 122% |
| PM2.5 | 24 hour [c] | 7.1 | 37.7 | 44.8 | 35 | NAAQS | 128% |
| | annual | 0.1 | 12 | 12.1 | 12 | CAAQS | 101% |
| CO | 1 hour | 3,228 | 6,785 | 10,013 | 23,000 | CAAQS | 44% |
| | 8 hour | 676 | 4,011 | 4,687 | 10,000 | CAAQS | 47% |
| $SO_2$ | 24 hour [c] | 10.5 | 23.6 | 34.1 | 105 | CAAQS | 32% |
| | annual | 0.1 | 10.7 | 10.8 | 80 | NAAQS | 14% |

Sources: ~~CECP Cumulative Assessment (SR 2008f).~~**Ex. 222, p 4.1-50; Ex. (TBD)**

[a] Background values have been adjusted per staff recommended background concentrations.

[b] Annual NO2 impact has been multiplied by the U.S.EPA Ambient Ratio Method value of 0.75.

[c] These 24-hour values are all based on worst-case existing Encina Boilers firing oil, when firing natural gas the worst-case cumulative PM10/PM2.5 and SO2 impacts are 1.4 and 0.4 µg/m$^3$, respectively.

**[d] Represents the air quality standard basis of the three year average of the 98$^{th}$ percentile of maximum daily 1-hour values.**

**21. Air Quality, p. 30 (numbered as 17), replace Condition AQ-SC5 in its entirety with the following:**

**AQ-SC5 Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the Monthly Compliance Report, a construction mitigation report that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling diesel construction-related emissions. The following off-road diesel construction equipment mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by AQ-SC2, and any deviation from the AQCMP mitigation measures shall require prior CPM notification and approval.**

**a. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the conditions set forth herein.**

**b. All construction diesel engines with a rating of 50 hp or higher shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 3 engine is not available for any off-road equipment larger than 50 hp, that equipment shall be equipped with a Tier 2 engine, or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides**

**(NOx) and diesel particulate matter (DPM) to no more than Tier 2 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" for the following, as well as other, reasons.**

1. **There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or**
2. **The construction equipment is intended to be on site for 10 days or less.**
3. **The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not practical.**

**c. The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and that a replacement for the equipment item in question meeting the controls required in item "b" occurs within 10 days of termination of the use, if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, if one of the following conditions exists:**

1. **The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.**
2. **The retrofit control device is causing or is reasonably expected to cause engine damage.**
3. **The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.**
4. **Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.**

**d. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.**

**e. All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.**

**f. Construction equipment will employ electric motors when feasible.**

**Verification: The AQCMM shall include in the Monthly Compliance Report the following to demonstrate control of diesel construction-related emissions:**

**A. A summary of all actions taken to control diesel construction related emissions;**

**B. A list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained; and**

**C. Any other documentation deemed necessary by the CPM, and the AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.**

**22. Air Quality, Conditions of Certification, make the following minor corrections to the indicated Conditions:**

**AQ-18** Turbine A is the combustion turbine as described on Applications No. 985745 or No.~~,~~ 985747, as applicable, that first completes its shakedown period. If both turbines complete their shakedown period on the same date, then Turbine A is the turbine described on Application No. 985745. [Rules 20.1(c)(16) and 21.]

**Verification:** The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

**AQ-19** Turbine B is the combustion turbine as described on Application**s** No. 985745 or No. 985747, as applicable, that last completes its shakedown period. If both turbines complete their shakedown period on the same date, then Turbine B is the turbine described on Application No. 985747. [Rules 20.1(c)(16) and 21.]

**Verification:** The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

**AQ-20** Low load operation is a period of time that begins when the gross electrical output (load) of the combustion turbine is reduced below 114 MW and that ends 10 consecutive minutes after the combustion turbine load exceeds 114 MW, provided that fuel is continuously combusted during the entire period and one or more clock hour concentration emission limits specified in this permit are exceeded as a result of the low-load operation. For each combustion turbine, periods of operation at low load shall not exceed 130 unit operating minutes in any calendar day nor an aggregate of 780 unit operating minutes in any calendar year. No low load operation period shall begin during a startup period. [Rule 20.3(d)(1).]

**Verification:** The project owner shall submit to the CPM the ~~engine~~ **gas turbine** operating data demonstrating compliance with this condition on request and shall make

the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

**AQ-57** A renewal source test and a NOx and CO Relative Accuracy Test Audit (RATA) shall be periodically conducted on each combustion turbine to demonstrate compliance with the NOx, CO, VOC, PM10, and ammonia emission standards of this permit and applicable relative accuracy requirements for the CEMS systems using District approved methods. The renewal source test and the NOx and CO RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, Appendix B, Sections 2.3.1 and 2.3.3. The renewal source test shall be conducted in accordance with a protocol complying with all the applicable requirements of the source test protocol for the Initial Emissions Source Test. [Rule**s** 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75.]

**Verification:** The project owner shall submit to the CPM for review and the District for approval the periodic RATA and source test protocols, and RATA source test reports within the timeframes specified in Conditions **AQ-53** and **AQ-54**.

**AQ-63** The project owner shall comply with the applicable continuous emission monitoring requirements of 40 CFR Part 75. [40 CFR Part 75.]

**Verification:** The project owner shall maintain a copy of the CEMS protocol required by **AQ-65~~64~~** on site and provide it, other CEMS data, and the CEMS for inspection on request by representatives of the District, ARB, and the Energy Commission.

**AQ-64** A continuous emission monitoring system (CEMS) shall be installed on each combustion turbine and properly maintained and calibrated to measure, calculate, and record the following, in accordance with the District approved CEMS protocol:

A. Hourly average(s) concentration of oxides of nitrogen (NOx~~X~~) uncorrected and corrected to 15 percent oxygen, in parts per million (ppmvd), necessary to demonstrate compliance with the NOx limits of this permit;

B. Hourly average concentration of carbon monoxide (CO) uncorrected and corrected to 15 percent oxygen, in parts per million (ppmvd), necessary to demonstrate compliance with the CO limits of this permit;

C. Percent oxygen ($O_2$) in the exhaust gas for each unit operating minute;

D. Average concentration of oxides of nitrogen (NOx) for each continuous rolling 3-hour period, in parts per million (ppmv) corrected to 15 percent oxygen;

E. Hourly mass emissions of oxides of nitrogen (NOx), in pounds;

F. Cumulative mass emissions of oxides of nitrogen (NOx) in each startup and shutdown period, in pounds;

G. Daily mass emissions of oxides of nitrogen (NOx), in pounds;

H. Calendar monthly mass emissions of oxides of nitrogen (NOx), in pounds;

I. Rolling 30-unit-operating-day average concentration of oxides of nitrogen (NOx) corrected to 15 percent oxygen, in parts per million (ppmvd);

J. Rolling 30-unit-operating-day average oxides of nitrogen (NOx) emission rate, in pounds per megawatt-hour (MWh)~~.~~**;**

K. Calendar quarter, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx), in tons;

L. Cumulative mass emissions of carbon monoxide (CO) in each startup and shutdown period, in pounds**;**

M. Hourly mass emissions of carbon monoxide (CO), in pounds;

N. Daily mass emission of carbon monoxide (CO), in pounds;

O. Calendar monthly mass emission of carbon monoxide (CO), in pounds;

P. Rolling 12-calendar-month period mass emission of carbon monoxide (CO), in tons;

Q. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) uncorrected and corrected to 15 percent oxygen, in parts per million (ppmvd), during each unit operating minute;

R. Average emission rate in pounds per hour of oxides of nitrogen (NOx) and carbon monoxide (CO) during each unit operating minute.

[Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75.]

**Verification:** The project owner shall submit to the CPM for review and the District for approval a CEMS protocol, as required by **AQ-65~~64~~**, which includes description of the methods of compliance with the requirements of this condition. The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

**AQ-68:** The oxides of nitrogen (NOx) and oxygen ($O_2$) components of the CEMS shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of sections 75.10 and 75.12 of title 40, Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMS protocol approved by the District. The carbon monoxide (CO) components of the CEMS shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit, and the CEMS protocol approved by the District. [Rule 69.3, 69.3.1 and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75.]

**Verification:** The project owner shall submit to the CPM for review and the District for approval a CEMS protocol, as required by **AQ-65~~64~~**, which includes description of the methods of compliance with the requirements of this condition. The project owner

shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

**AQ-75** Fuel flowmeters shall be installed and maintained to measure the fuel flow rate, corrected for temperature and pressure, to each combustion turbine. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, and Section 2.1.6. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part ~~k~~ 60 Subpart KKKK, and 40 CFR Part 75.]

**Verification:** The project owner shall submit to the CPM the natural gas usage data from the fuel flow meters as part of the Quarterly Operation Report (**AQ-SC8**).

**AQ-87** For each calendar month and each rolling 12-calendar-month period, the project owner shall maintain records on a calendar monthly basis, of aggregate mass emissions of NOx (calculated as $NO_2$), CO, PM10, and PM2.5, in tons, for the emission units described in District Permits to Operate No. 791, 792, and 793. Ther~~s~~e records shall be made available for inspection within 15 calendar days after the end of each calendar month. [Rules 20.3(d)(3), 20.3(d)(8) and 21]

**Verification:** The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

**AQ-89** For each combustion turbine, the project owner shall submit the following notifications to the District and U.S. EPA, Region IX:

a. A notification in accordance with 40 CFR Section 60.7(a)(1) delivered or postmarked not later than 30 calendar days after construction has commenced;

b. A notification in accordance with 40 CFR Section 60.7-(a)(3) delivered or postmarked within 15 calendar days after initial startup; and

c. An Initial Notification in accordance with 40 CFR Section 63.6145(c) and 40 CFR Section 63.9(b)(2) submitted no later than 120 calendar days after the initial startup of the turbine.

In addition, the **project owner**~~applicant~~ shall notify the District when: (1) construction is complete by submitting a Construction Completion Notice before operating any unit that is the subject of this permit, (2) each combustion turbine first combusts fuel by submitting a First Fuel Fire Notice within five calendar days of the initial operation of the unit, and (3) each combustion turbine first generates electrical power that is sold by providing written notice within 5 days of this event. [Rules 24 and 21 and 40 CFR Part 75, 40 CFR Part 60 Subpart KKKK, 40 CFR Part §60.7, 40 CFR Part 63 Subpart YYYY, and 40 CFR Part §63.9.]

The project owner shall provide notification to the District and U.S. EPA Region IX as required by this condition and shall provide copies of these notifications as part of the final monthly commissioning status reports (**AQ-80**) due the month after the notifications are sent.

**PUBLIC HEALTH**

**23. Public Health, p. 8, Finding 10, revise as follows:**

10. Cumulative impacts from non-criteria **(i.e., toxic)** pollutants were analyzed in accordance with the provisions of CEQA and are not expected to be significant.

**WORKER SAFETY/FIRE PROTECTION**

**24. Worker Safety, p. 4, last sentence, revise as follows:**

Both ramps and the road around the power plant at the bottom of the "bowl" will be at least **28** ~~30~~ feet wide at all places.

**25. Worker Safety, p. 6, first full paragraph, revise as follows:**

After extensive review of the various potential outcomes with the assistance of Caltrans, Staff testified that there is ample room under both the 8+4 and 10+4 configurations (the widest configurations Caltrans is considering) for the placement of a dirt berm west of the future Caltrans ROW. This berm can serve as a place for visual-blocking vegetation and serve as a protective barrier with room for a security fence. The I-5 encroachment will still leave room for a perimeter fire access road at the bottom of the bowl where the power plant will be located. Therefore, Staff found that the widening of I-5 will not impact safety or emergency response access to the proposed CECP site. **(Ex. 200, pp. 4.14-15 – 4.14-16.)**

**26. Worker Safety, p. 8, last full paragraph, revise as follows:**

Staff gathered data from the Applicant about the number and nature of emergency responses at the Encina Power Station. EPS has experienced no fires of any type since NRG acquired EPS in 1999, no hazmat spills requiring CFD or County response, no accidents or rescues, and one EMS response every two to three years. **(Ex. 200, p. 4.14-17.)**

**27. Worker Safety, p. 9, second full paragraph, revise as follows:**

The City asserts that the proposed on-site 250,000 gallon fire water storage tank and pumping system is not adequate and should be connected to the City's water system as a more reliable means of assuring adequate water to fight fires on the CECP site. It fears that a failure of the on-site pumps will lead to inadequate fire water flow. (Ex. 433, Weigand testimony, p. 5; 2/4/10 RT, 57 - 58.) Staff and the Applicant describe the

NFPA as requiring the 250,000 gallon fire water storage tank as protection against disruption of an off-site water supply. (Ex. 203, p. 25; 2/4/10 RT, 19.) Staff witness Dr. Greenberg and Applicant's witness Frank Collins offered their professional opinions that the on-site water storage and pumping system provided a suitable level of fire protection. (Ex. 203, p. 25.) ~~Dr. Greenberg's testimony indicates that "potable city water" will be used; implying a connection to the City's system but not clear whether that affords backup pressure should the on-~~site ~~pumps fail. (Id.) We will resolve this factual question during the PMPD comment/reopened Evidentiary Hearing. Based on the testimony, we find that either an on-site storage system or a connection to the City's system would provide adequate fire suppression water.~~ **During the May 19, 2011 reopened Evidentiary Hearing, witnesses for the Staff, Applicant and City agreed that the fire water system will be connected both to the storage tank via fire pumps and to the City's water system, providing redundancy and addressing the concerns of each. (5/19/11 RT, pp. 43 – 70.) We memorialize this design decision in new Condition of Certification Worker Safety-11.**

**28. Worker Safety, p. 10, fourth full paragraph, revise as follows:**

Staff testified to the results of its survey of access widths at other power plants approved by the Energy Commission. In some cases widths were as low as 20 feet. No complaints from fire service providers could be recalled. While we recognize the CFD's desire to optimize its working environment, after taking into account the low probability of a major event and our experience in other projects, we find the 28-foot minimum width and partial rim road to provide satisfactory access for emergency services. (2/4/10 RT: 131 – 134.) **Following a discussion during the May 19, 2011 reopened Evidentiary Hearing, we strengthen the 28-foot access road's effectiveness by adding a requirement that it be "red curbed"- painted red on their edges and signed to indicate that parking is not allowed. (5/19/11 RT, pp. 141, 168.)**

**The City insists that the Commission must adopt the access standards set by its fire officials, citing provisions of the Fire Code (24 Cal. Code Regs. §§ 503.2.1, 503.2.2) setting a 20-foot minimum width and allowing the "fire code official" to "require an increase in the minimum access widths where they are inadequate for fire or rescue operations." (24 Cal. Code Regs. § 503.2.2) "Fire code official" is defined as "[t]he fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative." (24 Cal. Code Regs. § 202.) Given the Energy Commission's exclusive jurisdiction over the permitting and regulation of thermal power plants such as the CECP, we believe the role of "fire code official" falls to us as we must both set the development standards for the project and then enforce them. While the opinions of the local fire officials who will provide the fire protection services are an important consideration, they are not dispositive. After considering those opinions, along with those of other experts, we decide that a 28-foot minimum road width is appropriate for this project.**

**29. Worker Safety, p. 11, revise Findings 6 – 9, as follows**:

6. The design of the project**, including fire lanes with a minimum width of 28 feet as required by this decision,** affords satisfactory access for fire and emergency responders.

7. A sufficient quantity of fire suppression water will be available.

8. The project will not have ~~a~~ significant direct, indirect, or cumulative impacts on worker safety, fire protection and emergency services

**9. The possible future widening of the Interstate 5 freeway will not degrade fire protection in any significant way.**

**10. The project will meet or exceed the requirements of the most recently adopted edition of the California Fire Code and applicable NFPA standards.**

**11** ~~9~~. With implementation of the Conditions of Certification, below, the CECP will comply with all applicable LORS.

**30. Worker Safety, p. 14, revise Condition Worker Safety-6 as follows:**

**WORKER SAFETY-6** The project owner shall ensure that the below-grade site fire lanes, access points, and ramps (with no more than a 10 percent grade) are constructed as per the dimensions shown in **Worker Safety Figure 1** and that at least two access points through the site perimeter and into the below-grade power plant site are available to the CFD and other emergency response providers. The access roads, below-grate perimeter road, and ramps shall be no less than 28 feet wide. **The project owner shall guarantee that the two fire access ramps down into the project site and the fire lane around the perimeter of the below-grade site are free and clear of all vehicles, equipment, or any other object (mobile or stationary) at all times and that the boundaries or curbs of the ramps and lanes are painted red and contain signage to indicate that they are fire roads and lanes.** The final blueprints for the site shall be submitted at least 30 days prior to the start of site mobilization to the Carlsbad Fire Department for review and comment and to the CPM for review and approval. ~~A copy of the~~ transmittal ~~letter to the Carlsbad Fire Department shall also be sent to the CPM.~~ Any requested changes in the fire lanes, ramps, and access points shall be made is writing to the CPM and the CBO for review and approval after obtaining comments from the CFD.

**Verification:** At least 60 days prior to the start of site mobilization, the project owner shall submit a copy of the final site blueprints to the Carlsbad Fire Department for review and comments and to the CPM for review and approval. The project owner shall also submit to the CPM a copy of the transmittal letter to the CFD.

**At least 60 days prior to the start of commissioning or the arrival on-site of any liquid fuel, natural gas, or hazardous material, whichever occurs first, the project owner shall submit to the CBO for information, to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval a signed declaration along with photographic evidence that the access ramps and fire lanes are guaranteed to always be clear and unobstructed and that signs and red paint have been placed in the appropriate locations.**

**31. Worker Safety, p. 15, add conditions Worker Safety-10 and Worker Safety-11, as follows**:

**WORKER SAFETY-10 The project owner shall prepare a Transformer Fire Protection Plan which shall evaluate any feasible methods that can be used to prevent, contain, and/or control a transformer fire, including the use of new dielectric fluids, pressure sensors with shut-down capability, dissolved gas analyzers, use of compressed-air-foam for fire suppression, on-site storage of suppressants, and sub-surface vaults to contain spilled/leaked dielectric fluids. The project owner shall submit this Plan to the CBO for information, to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval.**

**Verification: At least 60 days before the arrival of a transformer on site, the project owner shall submit a copy of the Transformer Fire Protection Plan to the CBO for information, to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval.**

**WORKER SAFETY-11 The project owner shall ensure that the primary source of fire protection water is the City of Carlsbad water system and that the on-site 250,000 gallon storage tank is the back-up supply.**

**Verification: At least 60 days before commencing commissioning, the project owner shall submit to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval engineering drawings showing the source and piping of the primary and back-up fire protection water supplies and a statement that the primary supply is the City of Carlsbad water system.**

**HAZARDOUS MATERIALS MANAGEMENT**

**32. Hazardous Materials, p. 14, add Condition HAZ-10, as follows:**

**HAZ-10 The project owner shall not conduct or allow any fuel gas pipe cleaning activities on the site involving fuel gas pipe of four-inches or greater external diameter, either before placing the pipe into service or at any time during the lifetime of the facility, that involve "flammable gas blows" where natural (or flammable) gas is used to blow out debris from piping and then vented to atmosphere. Instead, an inherently safer method involving a non-flammable gas (e.g. high pressure air, nitrogen, steam) or mechanical "pigging" shall be used. The project owner shall prepare a Fuel Gas Pipe Cleaning Work Plan which shall indicate the method of cleaning to be used, what gas will be used, the source of pressurization, and whether a mechanical Pipeline Inspection Gizmo (PIG) will be used, and submit this Plan to the CBO for information, to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval. Exceptions to any of these provisions will be made only if no other satisfactory method is available, and then only with the approval of the CPM after review and comment from the CBO and the Carlsbad Fire Department.**

**Verification: At least 30 days before any fuel gas pipe cleaning activities involving pipe of four-inches or greater external diameter, the project owner shall submit a copy of the Fuel Gas Pipe Cleaning Work Plan to the CBO for information, to the Carlsbad Fire Department for review and comment, and to the CPM for review and approval.**

**BIOLOGICAL RESOURCES**

**33. Biological Resources Table 1, revise as follows:**

**Biological Resources Table 1**
**Special-Status Species Reported or Suspected to Occur within One Mile of CECP**

| Common Name | Scientific Name | Status |
|---|---|---|
| **Plants** | | |
| California adolphia | *Adolphia californica* | CNPS List 2 |
| Coast woolly-heads | *Nemacaulis denudata* var. *denudate~~a~~***a** | CNPS List ~~2~~**1B** |
| Cliff spurge | *Euphorbia misera* | CNPS List 2; HMP |
| Orcutt's pincushion | *Chaenactis glabriuscula* ssp. ***o****rcuttiana* | CNPS List 1B |
| South Coast saltscale | *Atriplex pacifica* | CNPS List 1B |
| Wart-stemmed ceanothus | *Ceanothus verrucosus* | CNPS List 2; |

| Common Name | Scientific Name | Status |
|---|---|---|
| | | HMP |
| **Insects and Crustacea** | | |
| Saltmarsh skipper butterfly | *Panoquina errans* | HMP |
| San Diego fairy shrimp | *Branchinecta sandiegonensis* | FE; HMP |
| **Fish** | | |
| Tidewater goby | *Eucyclogobius newberryi* | FE; CSC |
| **Reptiles** | | |
| Southwestern pond turtle | *Emys marmorata pallida* | CSC |
| **Birds** | | |
| American peregrine falcon | *Falco peregrinus anatum* | FD; ~~CE~~**CD, FP**, HMP |
| Belding's savannah sparrow | *Passerculus sandwichensis beldingi* | CE; HMP |
| California brown pelican | *Pelecanus occidentalis californicus* | ~~FE~~**FD**; ~~CE~~**CD**, FP; HMP |
| California least tern | *Sterna antillarum browni* | FE; CE, FP; HMP |
| Coastal California gnatcatcher | *Polioptila californica californica* | FT; CSC; HMP |
| Cooper's hawk | *Accipiter cooperi* | WL; HMP |
| Elegant tern | *Sterna elegans* | WL; HMP |
| Light-footed clapper rail | *Rallus longirostris levipes* | FE; CE, FP; HMP |
| Osprey | *Pandion haliaetus* | WL; HMP |
| Western snowy plover | *Charadrius alexandrinus nivosus* | FT; CSC; HMP |
| White-faced ibis | *Plegadis chihi* | WL; HMP |
| **Mammals** | | |
| Pocketed free-tailed bat | *Nyctinomops femorosaccus* | CSC |

Source: (Ex. 200, p. 4.2-6.)

**State Status**
**CE** = State-listed as endangered
**CT** = State-listed as threatened
**CD = State delisted**
**CSC** = California species of special concern
**FP** = Fully protected
**WL** = Watch list

**Federal Status**
**FE** = Federally listed as endangered
**FT** = Federally listed as threatened
**FD** = Federally delisted

**CNPS Status**
**CNPS List 1B** = Plants rare, threatened, or endangered in California and elsewhere
**CNPS List 2 =** Plants rare, threatened, or endangered in California, but more common elsewhere

**HMP for Natural Communities in the City of Carlsbad**
**HMP** = covered species

## 34. Biological Resources, p. 8, last full paragraph, revise as follows:

~~If, however, EPS Units 4 and 5 were to cease operation in the future and their existing service and auxiliary water pumps were no longer needed, the CECP could require intake water from the Lagoon. This would likely require actions under the Clean Water Act, section 316(b) and the federal and state endangered species acts. (*Id*.) To address this possibility~~ **The timing of the closure of ESP EPS units 4 and 5 is uncertain, as the Water Board's OTC Policy leaves open the possibility that they**

**will continue to run after 2017 if they continue to be essential to electric system reliability, and also allows compliance with the Policy by mechanical or operational methods of reducing impacts. So long as units 4 and 5 continue to operate, CECP's use of ocean water will be from the EPS system (taking and returning water to the ocean), and will not result in any cumulative OTC or new impact related to OTC. Moreover, even if one assumes the eventual shutdown of units 4 and 5, the relatively small use of seawater taken from the OTC system would not be a significant cumulative impact to marine biology, as discussed further in this Decision under the topic of Soil and Water Resources.**

**In the event of the shutdown of units 4 and 5,** we have, at Staff's suggestion (02/04/10 RT 266:24-267:6), included Condition **BIO-9** to emphasize the need for possible future joint review and coordination. If **the** EPS Units ~~4 and 5~~ are in fact shut down in the future and this affects the CEC's intake water supply, the appropriate regulatory agencies will then assess the proper course of action to be taken [retain footnote 3].

**35. Biological Resources, p. 10, Findings 10 – 11, revise as follows:**

10. **The Water Board's OTC Policy does not require the shutdown of EPS units 4-5, but rather the reduction of OTC impacts.** ~~The potential shutdown of EPS Units 4 and 5 is a speculative future event, and is not part of the present project.~~

11. **The project's relatively small use of seawater for its desalination unit will not have a significant cumulative impact to marine biota.** ~~As proposed, the CECP will not withdraw water from Agua Hedionda Lagoon. The project will thus not cause entrainment or impingement impacts upon biological resources.~~

**SOIL AND WATER RESOURCES**

**36. Soil and Water Resources, p. 3, third and fourth paragraphs, revise as follows:**

The CECP would require approximately 517 acre-feet per year (AFY) of recycled water based on continuous operation ~~for 116.8 days (~~ **at a** 40 percent capacity factor~~)~~. The Applicant estimates that 19 AFY of potable water would be required for domestic purposes and fire protection. (Exs. 4, § 5.15.3.5; 200, pp. 4.9-5, 4.9-14.)

Desalinated ocean water is proposed as an alternative water source of industrial water should recycled water not be available. An on-site ocean-water purification system that would use two-stage reverse osmosis (RO) and ion exchange to produce high-quality industrial water. The intake for the ocean-water purification system would be from the existing EPS once-through cooling sea water discharge channel. Maximum intake of ocean water for purification purposes would range between 420 gallons per minute (gpm) without power augmentation and 848 gpm with power augmentation operating eight hours per day, plus additional ocean water for mixing at the outfall. The maximum

intake of ocean water for CECP operation and outfall dilution would be 3,000 gpm or approximately 4.32 million gallons/day (mgd) ~~or 1,900 AFY~~. (Exs. 35, §§ 2.3.2, 5.15.2.1; 200, pp. 4.9-6, 4.9-14.)

**37. Soil and Water Resources, p. 10, third and following paragraphs, revise as follows:**

While units 4 and 5 operate, CECP will draw its water from the discharge (output) part of the OTC system, using water already drawn in by EPS and circulated for cooling. CECP uses water already drawn from the ocean for cooling purposes and has no affect, positive or negative, on the impacts of drawing the water.

**The City and other intervenors have contended that the Water Board's new OTC Policy will require the shutdown of EPS units 4 and 5 at the end of 2017, and that the CECP should thus be analyzed as a "stand alone" use of ocean water that will cause some (albeit comparatively minor) impingement and entrainment of marine biota. This contention is incorrect for two reasons. First, the OTC Policy does not require the shutdown of units 4 and 5 at the end of 2017. Rather, it requires the significant reduction of entrainment and impingement effects by that date. The Policy specifically provides a performance standard to meet this requirement, allowing reduction by mechanical (e.g., such as booms or screens) or performance (e.g., reduced pumping) methods. The Commission should not speculate on how the Policy requirements will be met by EPS. In addition, the OTC Policy is very clear that the 2017 date is subject to review based on the electricity reliability needs of the State, and that it may be revised to allow operation until such time as the units are no longer necessary for San Diego's electric reliability.**

**"Even if one assumes the shutdown of EPS units 4 and 5, there is no evidence that the small desalination unit's use of OTC water would have a significant cumulative impact. The City, in its EIR for the Carlsbad Seawater Desalination Project (CSDP), concluded that there would be no significant impact for using 304 mgd of OTC intake water for that project. CECP will use a maximum of 4.3 mgd, and the evidence indicates that this use will likewise not be cumulatively significant."**

~~Once units 4 and 5 are retired, however, CECP, along with the Carlsbad Seawater Desalination Project (CSDP), will be the sole remaining users of the EPS OTC system. They will then be the cause for drawing ocean water with its attendant impacts on aquatic life.~~

~~CSDP is permitted at a volume of 304 mgd. CECP will intake at most 4.32 mgd, less than 1.5 percent of CSDP. On its own, CECP's intake of 4.32 mgd presents very little risk to marine organisms from entrainment and will present no risk from impingement due to the low intake approach velocities.~~

Considered on its own as many of the Intervenors suggest, and not recognizing the reduction in impingement and entrainment reductions by retiring units 1 – 3, the CECP process flows will result in an estimated total annual entrainment of 22.7 million fish larvae from Agua Hedionda Lagoon (AHL) where the existing intake for the EPS is located. This estimate is based on data collected at the EPS intake during the 2004-2005 Impingement Mortality and Entrainment Characterization Study that was reanalyzed using the flows for the CECP. Three taxa of fishes (gobies, combtooth blennies, and northern anchovies) would account for nearly 95 percent of all fish larvae entrained, with gobies representing more than 60 percent of the total. If operated 365 days of the year, the losses are estimated to represent less than 0.3 percent of the larval population of gobies and 0.2 percent of the population of combtooth blennies in the lagoon. Other fish, including anchovies, halibut, and croakers, had very low entrainment based on the Empirical Transport Model used for the analysis. The small fraction of marine organisms potentially lost due to CECP entrainment would have no effect on these populations. The most frequently entrained species are very abundant in the area of the EPS intake, AHL, and the SCB. Therefore, the actual ecological effects due to any additional entrainment from the CECP would not be significant. (Ex. 35, § 5.2.4.2.)

**38. Soil and Water, p. 11, insert the following new paragraph before the second full paragraph:**

**The parties have widely-differing positions about the timing of the shut-down of EPS units 4 and 5. However, because the project's entrainment and impingement impacts are not significant even if EPS units 4 and 5 are not operational, the timing of the shut-down of EPS units 4 and 5 does not affect our conclusions about the significance of these impacts.**

By analyzing and providing conditions for the use of both recycled and desalinated ocean water, we provide the Applicant with the ability to use its preferred source, if one be found, or ocean water if one cannot be found.

**39. Soil and Water, p. 12, last partial paragraph, revise as follows:**

Section 13550 of the California Water Code **states that the use of potable water for nonpotable uses (including industrial uses) is a waste or unreasonable use of water under certain circumstances.** ~~requires the use of recycled water for industrial purposes if recycled water is available~~. ~~Through the proposed use of~~ **By proposing to use either** recycled water **or desalinated ocean water** for operation of the CECP, ~~with desalinated ocean water as backup,~~ the Applicant **is ensuring that the project is consistent** ~~will be fully compliant~~ with this section of the water code.

**40. Soil and Water Resources, p. 14, add Findings 4 – 10 as follows:**

**4. Reclaimed water necessary for CECP's daily industrial needs is not currently available without a significant expansion of the City's wastewater treatment**

**infrastructure.**

5. **If reclaimed water is unavailable, CECP will rely on an on-site, reversed osmosis treatment system to derive necessary industrial water, generated from a maximum of 4.3 mgd of seawater .**

6. **The CECP's reversed osmosis system will reuse water pumped for cooling purposes through the EPS OTC system that will continue to be used by EPS units 4 and 5.**

7. **The State Water Board's OTC Policy does not require the shutdown of ESP units 4 and 5, and the closure date for those units is indeterminate.**

8. **The EPS OTC system will also be used by the Carlsbad Seawater Desalination Project (CSDP), which will require 304 mgd of seawater to generate 50mgd of fresh drinking water.**

9. **The CSDP project is currently permitted and under construction.**

10. **Even assuming the future shutdown of EPS units 4 and 5, CECP's use of water from the OTC system will not result in significant direct or cumulative impacts to marine biota.**

**41. Soil and Water Resources, p. 17, revise Condition Soil&Water-8 Verification as follows:**

**SOIL&WATER-8:** If the project owner relies on recycled water for CECP water supply, the project owner shall provide the CPM two copies of the executed Recycled Water Purchase Agreement (agreement) with the recycled water producer and the City of Carlsbad (City) for the supply and delivery of tertiary treated recycled water to the CECP. The CECP shall not connect to the City's recycled water pipeline without the final agreement in place. The project owner shall comply with the requirements of Title 22 and Title 17 of the California Code of Regulations and section 13523 of the California Water Code.

**Verification:** No later than 180 days prior to the connection to the City's recycled water pipeline, the project owner shall submit two copies of the executed agreement for the long-term supply and delivery of tertiary treated recycled water to the CECP. The agreement shall specify a maximum delivery rate of **945** ~~840~~ gpm and shall specify all terms and costs for the delivery and use of recycled water by the CECP.

No later than 60 days prior to connection to the City's recycled water pipeline, the project owner shall submit to the CPM a copy of the Engineering Report and Cross Connection inspection and approval report from the California Department of Public

Health and all water reuse requirements issued by the San Diego Regional Water Quality Control Board.

**CULTURAL RESOURCES**

**42. Cultural Resources, p. 5, delete last partial paragraph:**

~~Impacts to cultural resources could also occur during project operation if the gas or water pipeline requires repair via excavation that could uncover previously unknown subsurface archaeological resources. Commission staff appears to recommend that the mitigation measures described in Conditions CUL-1 though CUL-8 apply under any circumstances when project-related ground disturbance is necessary. We find nothing in the proposed conditions to that effect, however, and a simple statement here in the narrative portion of our decision is likely to be overlooked. Further, it may not be appropriate to apply all of the conditions—the worker awareness training, for example—to a discrete project conducted by a subset of the operations employees or a contractor conducting the specialized excavation work. We therefore invite the parties, especially the staff, to propose an additional condition specifying the measures that should apply to post-construction activities. (Exs 4, § 5.3.6; 200, p. 4.3-17, et seq.)~~

**43. Cultural Resources Condition CUL-1, p. 9, first paragraph, revise as follows, retaining the remainder of the Condition:**

The resumes of the CRS and alternate CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS/alternate CRS on referenced projects and demonstrate to the satisfaction of the CPM that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, including tank removal and soil remediation. **After all ground disturbance is completed and the CRS has fulfilled all responsibilities specified in these cultural resources conditions, the project owner may discharge the CRS, if the CPM approves. With the discharge of the CRS, these cultural resources conditions no longer apply to the activities of this power plant.**

**44. Cultural Resources Condition CUL-6, p. 15, revise as follows:**

**CUL-6** **The project owner shall ensure that the CRS, alternate CRS, or CRMs monitor full time all ground disturbance of native soils at the project site, along linear facilities and roads, and at parking and other ancillary areas, including wetlands mitigation areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.**

~~The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor ground disturbance, including tank removal and soil remediation, full~~

~~time at the project site and linear facilities, and ground disturbance full time at laydown areas or other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner (discovery). Specifically, the CRS, alternate CRS, or CRMs shall monitor the ground disturbance, including tank removal and soil remediation that reaches to within 3 feet of native soil below the fill and all ground disturbances, including tank removal and soil remediation, in native soil. Whether or not archaeological monitoring is being conducted at project locations, twice daily, in the morning and afternoon, an archaeological monitor shall examine locations where machinery is disturbing fill soil to determine whether native soils might be disturbed. If disturbance is within 3 feet of native soil, full-time monitoring shall commence.~~

Full-time archaeological monitoring for this project shall be the archaeological monitoring of all earth-moving activities on the project site and laydown areas, including tank removal and soil remediation, for as long as the activities are ongoing. Full-time archaeological monitoring shall require at least one monitor ~~per excavation area~~ where machines **are actively disturbing** ~~may disturb~~ native soils. If an excavation area **or areas are** ~~is~~ too large for one monitor to effectively observe the soil removal, one or more additional monitors shall be retained to observe the area.

**In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.**

If future geotechnical core borings are conducted for the project, they shall be monitored and the boring cores examined by a geoarchaeologist or qualified archaeologist for the presence of cultural material. If cultural material is identified, that information shall be reported to the CPM within 24 hours. Whether or not cultural material is identified, the results of the core examinations shall be provided in a report to the CPM.

In the event that the CRS determines that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.

On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the

Monthly Compliance Report (MCR). If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

**The project owner shall obtain a Native American monitor to monitor ground disturbance in any areas where Native American artifacts are discovered in native soils.** ~~A Native American monitor shall be obtained to monitor ground disturbance, including tank removal and soil remediation, in areas where excavations may extend into native soil.~~ Informational lists of concerned Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow ground disturbance, including tank removal and soil remediation to proceed without a Native American monitor.

**Verification:** At least 30 days prior to the start of ground disturbance, including tank removal and soil remediation, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log. While monitoring is ongoing, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS.

Daily, the CRS shall provide a statement that “no cultural resources more than 50 years of age were discovered” to the CPM as an e-mail or in some other form acceptable to the CPM. The statement shall also include information based on the twice daily observations of soils by the archaeological monitor and indicate the likelihood of disturbing native soils. If the CRS concludes that daily reporting is no longer necessary, a letter or e-mail providing a detailed justification for the decision to reduce or end daily

reporting shall be provided to the CPM for review and approval at least 24 hours prior to reducing or ending daily reporting. At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

At least 24 hours prior to implementing a proposed change in monitoring level, documentation justifying the change shall be submitted to the CPM for review and approval.

If geotechnical core borings are conducted and cultural material is identified by a geoarchaeologist or archaeologist, the CPM shall be notified within 24 hours. Within 30 days after the examination of the core borings is completed, the CRS shall provide a copy of the results of the core examinations in a report to the CPM.

## GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

**45. Geo/Paleo, p. 8, Conditions 10 – 16, revise and renumber as follows:**

10. The evidence **indicates** ~~assumes~~ that liquefaction, lateral spreading, dynamic compaction, hydrocompaction, landslides, flooding, tsunamis, and seiches pose low or negligible project risks but this assumption must be confirmed by the site-specific geotechnical investigation referenced above in Findings #7, #8, and #9.

**11. Project construction will conform to the most recently adopted version of the California Building Code, including its seismic requirements for the project locality, based on the results of the required geotechnical investigation.**

**12. Geologic hazards to the project, including those from seismic events, would be low, but must be addressed in the geotechnical report provided consistent with the most recently adopted version of the California Building Code.**

**13. Compliance with the seismic requirements of the California Building Code effectively mitigates the danger to project structures from seismic ground shaking.**

**14**~~11~~. There is no evidence of existing or potential geologic or mineralogic resources at the project site or along the linear alignments.

**15**~~12~~. Although many paleontologic sites are documented within three miles of the site, there are no records documenting paleontologic finds on the CECP site or along the project's linear alignments.

**16**~~13~~. Since the ground surface at the site is disturbed, the surface fill material is unlikely to contain significant paleontologic resources within their natural context and is assigned a zero paleontologic sensitivity rating.

**17**~~14~~. Fossil remains have been documented within 500 to 750 feet south of the existing EPS ocean-water pipeline intake and discharge location and, thus, any excavations for these pipelines have a high potential to impact paleontologic resources.

**18**~~15~~. To mitigate any potential impacts to newly discovered paleontologic resources during excavation and construction, the project owner will implement a Paleontological Monitoring and Mitigation Plan, including a Worker Environmental Awareness Program, and employ an on-site Paleontologic Resource Specialist with authority to halt construction activities when paleontologic resources are identified.

**19**~~16~~. There is no evidence that project construction or operation will result in cumulative impacts to geologic, mineralogic, or paleontologic resources.

**LAND USE**

**46. Land Use, p. 18, revise first full paragraph as follows:**

We find, therefore, that CECP is a "public utility" as that term is used in the City's General Plan and zoning ordinance.[2] CECP is therefore permitted on the project site subject to the approval of the equivalent of a Precise Development Plan. (Carlsbad Municipal Code §21.36.010.) The analysis required in consideration of a Precise Development Plan approval includes a finding of consistency with the General Plan, which includes consistency with the list of allowed uses, ~~present here,~~ and consistency with the various policies contained in the general plan**, both present here**.[3]

**47. Land Use, p. 20, second paragraph, revise as follows:**

Carlsbad Municipal Code §21.36.070 specifies that "[a]ll buildings and structures, including accessory buildings and structures, shall cover no more than fifty percent of the area of the lot." ~~The evidence is silent on this point. We've directed the parties to provide evidence on the lot coverage proposed by CECP during the reopened~~

**[2] Power of Vision (POV PMPD Comments, p. 2) and the City (Carlsbad PMPD Comments, p. 125) argue that the Commission is bound by a determination in the Chula Vista case (07-AFC-4) that a merchant power plant does not constitute a public use. In that case, the Decision interpreted a zoning code provision requiring that permitted uses be "maintained by public or publicly controlled agencies." Here the City's plans and ordinances are silent regarding ownership or control. We decline to read such a requirement into those documents.**

[3] In this regard, we consider the PDP as the functional equivalent of a conditional use permit, a quasi-adjudicative, rather than a legislative decision. While legislative decisions, such as a change of zoning or general plan amendment, are left to the local agency, even when the Energy Commission has jurisdiction, quasi-adjudicative decisions are made by the Energy Commission in place of the local agency. This Commission Decision approving the CECP takes the place of a PDP, contrary to the assertions of Intervenor Power of Vision (POV PMPD Comments, p. 2) that a PDP must be submitted to the City of Carlsbad.

~~Evidentiary Hearings in May, 2011.~~ **The CECP has no enclosed space and therefore no buildings. Assuming that the power generating equipment is a "structure," the lot coverage requirement is satisfied as the power generator units occupy approximately 7 acres of the 23-acre CECP project site. (Ex. 35, Figure 2.1-1, Applicant's PMPD Comments, pp. 6 – 7.)**

**48. Land Use, p. 21, last paragraph, revise as follows:**

**In preparing the PMPD, the Carlsbad AFC Committee** found ~~We find~~ the purposes described by Staff compelling but **was** ~~are~~ not yet convinced that they **rose**~~rise~~ to the "extraordinary" level. **The Committee requested further evidence and proposals regarding the potential for speeding the removal of** ~~Two missing benefits that the City mentions – increasing the certainty that~~ the existing plant's massive boiler/turbine building and 400-foot stack ~~will be removed~~ when they are no longer needed to support the grid~~ have merit. We recognize that those old structures are an irritant to the residents and visitors to Carlsbad. During the May, 2011 PMPD Comment Hearing, we will entertain proposals from the parties and public as to whether such a process is appropriate, how it might work[4] and suggested language for a condition to be applied to this Energy Commission permit.~~ **During the May 19 and 20, 2011, re-opened Evidentiary Hearings and PMPD Comment Hearing, the question of whether CECP affords extraordinary public purpose was revisited. Following the Hearings and private discussions with the City of Carlsbad, the applicant proposed conditions LAND-2 and LAND-3 providing for the planning, permitting, and financing of the removal of Units 1 – 5 once they are no longer needed to support the electricity system. A Demolition, Removal, and Remediation Plan (DRRP) must be presented by January 1, 2016, followed by a cost study one year later. Applications for required permits must be submitted by July 11, 2016. The City, though it does not find extraordinary purpose in this proposal, supports the new Conditions. We adopt both Conditions with the addition of an annual reporting requirement.**

**The South Bay powerplant was retired at the beginning of 2011. In addition, on May 19, 2011 hearings, SDG&E announced its intention to enter into Power Purchase Agreements (PPAs) with three separate power plant projects (Escondido Energy Center, Pio Pico Energy Center and Quail Brush Power) proposed in San Diego area, totaling approximately 450 MW. It applied for approval of the PPAs from the California Public Utilities Commission.[5]**

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[4] ~~We note that SP-144 has begun to address this issue:~~

~~"In the event that the City of Carlsbad determines that the 400-foot stack is no longer necessary as a method of air emission dispersion, the 400-foot stack shall be removed at the applicant's expenses. The applicant may request an amendment to this specific plan to provide a reasonable extension of the period for such removal." SP-144, paragraph III. 14(G).~~

**[5] The City has requested that take official notice of the Application Of San Diego Gas & Electric Company (U 902 E) For Authority To Enter Into Purchase Power Tolling Agreements With**

**The City and other intervenors argue, in various ways, that the proposed award of PPAs indicates that CECP is no longer necessary in any way, certainly not enough to justify placing it on the coast. They argue that the existing Encina units, with the impending once through cooling (OTC) rule slating the shut down of their cooling system by 2017 combined with this loss of a market for their power, will shut of their own accord, without help from the construction and operation of CECP. Thus, in their opinion, approving CECP would serve no purpose, and certainly not an extraordinary purpose.**

**Underpinning the intervenors' argument, however, are several significant assumptions, none of which are particularly certain at this point. The recently adopted OTC rules, of which we also take official notice, do not require that the EPS generators cease to operate; it is possible for an OTC operator to reconfigure or add technological improvements to its OTC system such that it may continue to use OTC. They also allow for the extension of existing OTC uses past the stated deadlines if a generator 's continued operation is necessary for the protection of the grid. LAND-2 and LAND-3, on the other hand, make no such allowances and require the planning and removal of the EPS facility.**

**A further assumption of suspect value is that EPS' owner will, once the generating equipment is retired, quickly move to remove it. It could just as easily sit in place for many years while the owner debates what to do next. LAND-2 and LAND-3 offer an opportunity to assure the timely removal and redevelopment of the portion of the EPS site to the west of the rail lines and closest to the beach, replacing it with a modern, efficient power plant of much more modest profile located further away from the shore. Public comment in this case has been nearly universal in desiring the removal of EPS. Many, but not all, would prefer that the CECP portion of the site remain free of power plants but this replacement offers a significant net benefit.**

**The PPA candidate power plants do not presently exist. In the case of Pio Pico an Application for Certification is pending before this Commission in its discovery phase. Quail Bush is likely to require Commission approval but has not yet filed an application. The third project is not subject to Commission jurisdiction and its permitting status is unknown to us. Whether these projects will ultimately receive permits is not certain, nor is it certain that they will be financed and constructed, or that their PPAs will be approved by the CPUC.**

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**Escondido Energy Center, Pio Pico Energy Center And Quail Brush Power, and Prepared Direct Testimony Of San Diego Gas & Electric Company In Support Of Application For Authority To Enter Into Purchase Power Agreements With Escondido Energy Center, Pio Pico Energy Center And Quail Brush Power Project, filed May 19, 2011. We take official notice of those documents for the limited purpose of recognizing that SDG&E has proposed to enter into the contracts. We do not take notice of the documents for the broader purposes proposed by the City, such as providing testimony on the effects on the electricity system from operation of those units and the "need" for CECP. It would be unfair to do so at this late point in this proceeding as the other parties have not had the opportunity to digest this information or to prepare any responses.**

**In sum, the evidence cited by intervenors is not compelling. The shutdown of Units 1 – 5 and the construction and operation of the three plants with which SDG&E has entered into a power purchase agreement are far from certain. It is clear that additional generation in the area is needed that if this plant is constructed and operated, it will provide that generation as well as reduce reliance on generation units using once-through cooling. These facts – in combination with the benefits provided by LAND-2 and LAND-3 are sufficient to support a finding of extraordinary benefit. We decline to speculate about the ultimate success or failure of other projects that would provide some – but not all – of the same or similar benefits.**

**e. City Urgency Ordinance**

**The City asserts that, by its enactment of an urgency ordinance (Ex. 404) placing a "moratorium" on the processing of any applications for power plants in the coastal zone, the Commission is precluded from approving CECP unless it makes the required findings to override the urgency ordinance. The ordinance was adopted with no underlying CEQA document: it was declared exempt under CEQA Guideline 15262 as a "project involving only feasibility and planning studies for future actions" by the City, indicating its internally directed, non-substantive effect. (2-1-10 RT, 239-240.) The City's witness testified that this action "was not intended to apply to anybody other than the city and city actions." (Id., at p. 240.) Applicant's land use witness agreed. (Id., at pp. 170-171.)**

**49. Land Use, p. 25, revise Findings 5 – 7 as follows:**

5. **The CECP is consistent with the Carlsbad General Plan. It is an allowed use under the Public Utilities land use designation and, on the whole, is consistent with the various policies in the General Plan.**

**6. The CECP is consistent with the Encina Specific Plan and its few specific development standards. The Specific Plan's requirement that the plan be amended to account for new development, alike in function to a conditional use permit, is satisfied by this Commission's decision on the AFC.**

**7. The CECP is consistent with the Agua Hedionda Land Use Plan, which contains provisions similar to those in the General Plan**

8. ~~With the possible exception of a finding that the~~ **With the imposition of Conditions LAND-2 and LAND-3 requiring the planning, permitting and financing of the eventual removal and redevelopment of the existing EPS power plant, the** CECP serves an extraordinary public purpose, **as** required under**, and is in all other respects consistent with** the South Carlsbad Coastal Redevelopment Area Plan~~, the CECP is consistent with applicable land use LORS~~. **The Plan's intent was described as replacing the existing EPS**

**power plant, located to the west of the rail corridor with a plant to the east of the corridor, further from the shoreline. The CECP furthers a Plan Goal to "[f]acilitate the redevelopment of the Encina Power Generating Facility to a physically smaller, more efficient power generating plant."**

**9. The CECP is consistent with the PU zoning applied to the CECP site, which allows the "generation and transmission of electrical energy" subject to approval of a Precise Development Plan. This Commission approval serves as the equivalent of a Precise Development Plan approval.**

**10. The City's urgency ordinance placing a moratorium on the processing of permits for power plants in the coastal zone does not apply to the Energy Commission.**

**11**~~6~~. The CECP is compatible with surrounding land uses and will not result in any unmitigated public health or environmental impacts to sensitive receptors.

**12**~~7~~. With implementation of Condition**s** of **Certification** LAND-1, **LAND-2 and LAND-3,** the CECP's contribution to cumulative impacts of existing and proposed projects will not be cumulatively considerable.

**50. Land Use, p. 26, add new Conditions LAND-2 and LAND-3, as follows:**

**LAND-2 On or before January 1, 2016, the project owner shall prepare and submit a Demolition, Removal, and Remediation Plan (DRRP) to the CPM, the City of Carlsbad, and the Carlsbad Redevelopment Agency. The DRRP shall propose the process, schedule, and legal requirements for the demolition, removal, and remediation of the Encina Power Station (Units 1 through 5), associated structures, the black start unit and the exhaust stack. As part of completion of the DRRP, project owner shall consult with the California Energy Commission, the California Coastal Commission, the City of Carlsbad, the Carlsbad Redevelopment Agency, the San Diego Regional Water Quality Control Board, the San Diego Air Pollution Control Board, and the California Independent System Operator to ensure the DRRP best reflects the procedural and substantive requirements that will apply to the site.**

**On or before January 1, 2017, project owner shall prepare and submit to the CPM, the City of Carlsbad, and the Carlsbad Redevelopment Agency, a study of the estimated costs associated with implementing the DRRP.**

**Project owner shall demonstrate, to the CPM's satisfaction, fiscal capability to implement the DRRP prior to commencement of demolition activities. Such demonstration could be accomplished by**

**submittal of a financial plan, deposit of funds into a dedicated account, or any combination thereof.**

**Concurrent with submittal of the DRRP, or by a date mutually agreed to by project owner and the Carlsbad Redevelopment Agency, project owner shall initiate the process with the Carlsbad Redevelopment Agency for redeveloping the existing Encina Power Station area of the project by submitting a redevelopment application.**

**Verification: On or before January 1, 2016, project owner shall provide the DRRP to the CPM for review and approval and to the City of Carlsbad, the Carlsbad Redevelopment Agency, and the California Coastal Commission for review and comment. The City of Carlsbad and the Carlsbad Redevelopment Agency shall provide comments on the DRRP to the CPM and project owner within 60 days or a date mutually agreeable to project owner and the City of Carlsbad and the Carlsbad Redevelopment Agency.**

**On or before January 1, 2016, project owner shall submit to the CPM evidence that the redevelopment process with the Carlsbad Redevelopment Agency for redeveloping the Encina Power Station site has begun or shall submit to the CPM evidence of a later mutually agreed upon date by project owner and the Carlsbad Redevelopment Agency to begin the redevelopment process.**

**On or before January 1, 2017, project owner shall submit the results of the study on estimated costs of implementing the DRRP to CPM for review and approval and to the City of Carlsbad and the Carlsbad Redevelopment Agency for review and comment. The City of Carlsbad and the Carlsbad Redevelopment Agency shall provide comments on cost estimate to the CPM and project owner within 60 days or a date mutually agreeable to the project owner and the City of Carlsbad and the Carlsbad Redevelopment Agency.**

**The project owner shall report to the CPM on June 30, 2012 and every June 30 thereafter until notified by the CPM that reports are no longer required, as to the progress made toward satisfaction of this Condition and Condition LAND-3. The reports shall include all relevant information, including an assessment of the factors which continue to require that any or all of Units 1 through 5 and the black start unit remain operational.**

**LAND-3 On or before July 1, 2016, project owner shall submit applications for required permits and approvals for demolition, removal, and remediation of the Encina Power Station (Units 1 through 5), associated structures, the black start unit and the exhaust stack.**

**Upon the commencement of commissioning activities of the project, project owner shall request permission from the California Public**

**Utilities Commission (CPUC) to permanently shut down Units 1 through 5 at the Encina Power Station and the black start unit. Within six months following the shutdown of Units 1 through 5 at Encina Power Station and the black start unit pursuant to the above CPUC approval, and in compliance with all permits and approvals necessary to perform such activities, project owner shall commence demolition, removal, and remediation of the Encina Power Station (Units 1 through 5), all associated structures, the black start unit and the exhaust stack.**

**Verification: Project owner shall provide evidence to the CPM, not later than September 1, 2016, of the submittal of permit and approval applications to required agencies for the demolition, removal and remediation.**

**Within six months following approval by the CPUC, project owner shall demonstrate to the satisfaction of the CPM that it has shut down Units 1 through 5 of Encina Power Station and the black start unit, and commenced the demolition, removal, and remediation. Concurrent with such demonstration, project owner shall also demonstrate compliance with any fiscal capability funding requirements related to the CPM's approval of the financial plan for demolition, removal and remediation in LAND-2.**

**Within 36 months of the start of demolition, removal, and remediation, the project owner or its parent company shall demonstrate to the satisfaction of CPM that demolition and removal of the Encina Power Station Units 1 through 5, all associated structures, the black start unit and the exhaust stack and remediation of the site is complete.**

**SOCIOECONOMICS**

**51. Socioeconomics, p. 5, Finding 8, revise as follows:**

8. The project will have a construction payroll of approximately $**54.6** ~~54.4~~ million.

**NOISE AND VIBRATION**

**52. Noise, p. 8, last partial paragraph, revise as follows:**

The evidence further explains that other identified projects have not progressed sufficiently to enable the performance of meaningful cumulative impacts analyses. (2/4/10 RT 261; Ex. 200, pp. 4.6-12 – 4.6-13.) For example, **the noise impact, if any, from** the **possible future** widening of I-5 is **speculative and impossible to discern at the present time. The evidence indicates that the project is as much as 10 years in the future, making the estimation of traffic levels, traffic speeds, and vehicle noise emissions very inexact. Moreover, the project is still at the planning and environmental analysis stage, so there is no certainty about what kind of**

**mitigation for noise may accompany it, nor how effective that mitigation might be. For example, if (and we cannot know this) the project does incorporate a sound wall for noise mitigation, it is impossible to know, without specifications (location, materials, height, etc.) how that would affect traffic sounds, an effect which is itself impossible to meaningfully estimate for an impact so far in the future. (See, e.g., 2/4/10 RT 255-257.)** ~~a speculative future event, and therefore not part of the existing baseline level. Moreover, even if that project incorporates a sound wall to mitigate noise, such wall would cause only a very minor impact upon noise levels. (2/4/10 RT 255-56, 257:2-15.)~~ Uncontroverted evidence further establishes that any future shutdown of EPS Units 4 and 5, as well as the construction of the Coastal Rail Trail, are also imprecise potential events which currently defy meaningful analysis. Other projects appear similarly uncertain. (Ex.146; Applicant's Opening Brief, p. 5.) The evidence thus shows that no cumulative noise impact will result from the CECP in combination with other non-speculative projects. (Ex. 200, p. 4.6-13.)

**53. Noise, p. 10, revise Condition NOISE-1 as follows:**

**NOISE-1** At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within **one-mile of the site to the north and north-east and** one-half mile of the site **in all other directions**, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project and include that telephone number in the above notice. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

**Verification:** Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed, describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

**54. Noise, p. 12, Condition NOISE-4, first paragraph, revise as follows, retaining the remainder of the Condition:**

**NOISE-4** The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due solely to plant operation to exceed an average of **53** ~~51~~ dBA Leq measured at monitoring locations M2 or M7. No new pure-tone components shall be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.

**VISUAL RESOURCES**

**55. Visual Resources, p. 52, add new Findings 9 – 11 and renumber existing Findings 9 – 11 as follows:**

**9. The potential CALTRANS I-5 widening project is proposed to occur several years in the future, and may encroach in some measure on the CECP site, creating a potential cumulative visual impact.**

**10. The evidence, including CALTRANS planning documents and measurements by Staff using those documents, establishes that the I-5 widening project will leave sufficient room for a buffer that can include a new landscaped berm to mitigate visual impacts of the project.**

**11. Assuming the CALTRANS I-5 widening proceeds as planned, the mitigation provided in VIS-5 requires the applicant to create a berm with a visual buffer, working cooperatively with CALTRANS when that project is built; such mitigation sufficiently reduces the potential cumulative impact of that future project to one that is less than significant.**

**12** ~~9~~. Potential cumulative visual impacts caused by the Carlsbad Energy Center Project can be mitigated to below the level of significance.

**13** ~~10~~. Implementation of the Conditions of Certification will ensure that the project's visual impacts are less than significant.

**14** ~~11~~. The Carlsbad energy Center Project will be consistent with all applicable visual laws, ordinances, regulations, and standards relating to visual resources identified in the pertinent portion of Appendix A of this Decision.

Dated: June 14, 2011, at Sacramento, California.

JAMES D. BOYD
Vice Chair and Presiding Member
Carlsbad AFC Committee